

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently amended) An image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a signal processing device which performs signal processing so as to generate image data from an image sensing signal output from the image sensing element;

a brightness value calculation device which calculates a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a brightness value correction device which calculates a second brightness value by correcting the first brightness value on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a control device which controls the signal processing in said signal processing device by using the second brightness value.

2. (Original) The apparatus according to claim 1, wherein said control of the signal

processing includes control of white balance processing.

3. (Currently amended) An image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a signal processing device which performs signal processing so as to generate image data from an image sensing signal output from the image sensing element;

a brightness value calculation device which calculates a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a brightness value correction device which calculates a second brightness value by correcting the first brightness value on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a control device which controls an optical system by using the second brightness value.

4. (Original) The apparatus according to claim 3, wherein said control of the optical system includes control of an exposure value to the image sensing element.

5. (Original) The apparatus according to claim 4, wherein the optical system further comprises an aperture device which changes an aperture diameter, and control of the exposure value includes control of the aperture diameter of the aperture device.

6. (Original) The apparatus according to claim 1, wherein the optical filter includes an ND filter.

7. (Original) The apparatus according to claim 1, wherein said brightness value calculation device calculates the first brightness value on the basis of an aperture value determined in accordance with an aperture diameter of an aperture device, a time value determined in accordance with a time during which an object image is formed on the image sensing element, and a sensitivity of the image sensing element.

8. (Currently amended) An image sensing method using an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the a first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by

the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

9. (Original) The method according to claim 8, wherein control of the signal processing in the third step includes control of white balance processing.

10. (Currently amended) An image sensing method using an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the a first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling an optical system by using the second brightness value calculated in the second step.

11. (Original) The method according to claim 10, wherein control of the optical system in the third step includes control of an exposure value to the image sensing element.

12. (Currently amended) A computer readable recording medium which records a program for controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the program causing a computer in the image sensing apparatus to execute:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

13. (Original) The medium according to claim 12, wherein control of the signal processing in the third step includes control of white balance processing.

14. (Currently amended) A computer-readable recording medium which records a

program for controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the program causing a computer in the image sensing apparatus to execute:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the a first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling an optical system by using the second brightness value calculated in the second step.

15. (Original) The medium according to claim 14, wherein control of the optical system in the third step includes control of an exposure value to the image sensing element.

16. (Currently amended) A computer readable medium having stored there on a program for causing a computer to execute a method of controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the method comprising:

a first step of calculating a first brightness value representing a brightness of part

or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the a first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

17. (Original) The program according to claim 16, wherein control of the signal processing in the third step includes control of white balance processing.

18. (Currently amended) A computer readable medium having stored thereon a program for causing a computer to execute a method of controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the method comprising:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting the a first brightness value calculated in the first step on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by

the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and
a third step of controlling an optical system by using the second brightness value calculated in the second step.

19. (Original) The program according to claim 18, wherein control of the optical system in the third step includes control of an exposure value to the image sensing element.